

ANNUAL REPORT of HEALTH of STAFFORD

1900.

ERRATA—

Page 8, last line, instead of 56 read 46.

Page 9, substitute following Table for one as printed.

Where Treated.	No. of Cases	Deaths.	Proportion of Deaths to Cases.
At Home	46	12	26·08 per cent.
Isolation Hospital ..	50	6	12 "
Workhouse Hospital	5	0	0 "
Total 	101	18	17·8 per cent.





TWENTY-SEVENTH

ANNUAL REPORT

OF THE

HEALTH OF STAFFORD.

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B.A. Dunelm, M.B. & C.M., Edin.,

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1900.

STAFFORD :

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REPORT.

I.—Vital Statistics, together with Remarks on the Mortality during the year.

Area—The Borough of Stafford contains an area of Area.
1,084 acres.

Population—Estimated to the middle of the year 1900, Population.
the population, including the Public Institutions, was 22,427,
and was distributed as follows :—

Stafford Borough	...	...	20,538
County Asylum	...	...	984
Workhouse	292
Infirmary...	77
H.M. Prison	536
Total in the Institutions	1,889
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Total	22,427*
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The population gives an average density of 20·68
persons per acre.

Births—The number of Births registered during the Births.
year was 541, of which 270 were males, and 271 were females.
These returns, which are equal to an annual rate of 25·91
per 1,000, are the lowest of any recorded year, and, I am
sorry to say, emphasize the steady decline which set in
some twenty years ago. Compare 748, the return of
1878 with those of last year, a decrease of over 200 ! They
are certainly significant. And, unfortunately, it is an
experience which is being noted throughout the country.
This declining birth-rate is a matter of grave importance,
and it must become in the course of years one of the first
social questions of the country. Our national progress can-
not continue with a declining population.

* The **Corrected Rates** are reckoned upon a population of 20,873, obtained
by deducting 1554 from the total, that being the proportion of those in the
Institutions who do not belong to the Borough.

BIRTH RETURNS FROM 1890 TO 1900.

Year	Males.	Females	Total.	Rate per 1000
1890	286	282	568	29·40
1891	334	264	598	31·92
1892	281	314	595	31·31
1893	290	286	576	30·45
1894	314	329	643	33·74
1895	317	283	600	30·38
1896	329	262	591	29·69
1897	279	263	542	26·88
1898	292	277	569	27·95
1899	279	287	566	27·52
Yearly Average	300·1	284·7	584·8	29·92
1900	270	271	541	25·91

Deaths.

Deaths—The total number of Deaths registered in the district during the year was 519, of which 270 were males and 249 were females. There were in addition 6 deaths in the Isolation Hospital of persons belonging to the Borough. There were 159 deaths of persons who did not belong to the Borough previous to their admission into one or other of the public institutions. The **Corrected** number of deaths, therefore, is 366, which is equal to a rate of 17·53 per 1,000 per annum. This is the highest rate since 1884, and is due to the excessive mortality from Measles, Whooping Cough, Diphtheria, and Diseases of the Respiratory Organs. Statistics for the previous ten years are given at the end in Table I.

QUARTERLY RETURNS.		Quarterly Returns.
1st Quarter, 108	Death-rate, 20·69	
2nd „ 105	„ 20·12	
3rd „ 68	„ 13 03	
4th „ 85	„ 16 28	
Average 91·5	Average 17·53	

Infantile Mortality—There were 80 deaths of children under a year old, which are equal to a rate of 147 per 1,000 registered births. These returns are higher than the average of the preceding ten years, viz: 76 deaths with a rate of 130. Measles caused 5 deaths, Whooping Cough 5, Diarrhœa 2, Enteritis 2, Bronchitis and Pneumonia 12, Premature Birth 15, Convulsions 16, and other diseases 23. Infantile Mortality.

Zymotic Diseases—There have been 51 deaths from the chief Infectious Fevers and Diarrhœa, giving a Zymotic death-rate of 2·44 per 1,000. These returns are the highest since the year 1878. From the table on next page it will be seen that the average for the preceding ten years is 20 6 with a rate of 1·02, so that this year the returns are more than double. Measles, Diphtheria, and Whooping Cough have caused the increase. There have been no deaths from Scarlet Fever or Enteric Fever. Zymotic Diseases.

Phthisis—The returns are below the average of the past ten years. There were 28 deaths, which are equal to a rate of 1·34 per 1,000. Phthisis

Year.	No. of Deaths.	Rate per 1000.
1890	45	2·33
1891	27	1·44
1892	31	1·63
1893	26	1·37
1894	24	1·25
1895	43	2·17
1896	29	1·45
1897	27	1·33
1898	33	1·62
1899	25	1·21
Yearly Average 1890-99	31	1·58
1900	28	1·34

Developmental Diseases—There have been 44 Developmental Diseases. deaths in this class, 15 being ascribed to Premature Birth, and 29 to Old Age.

Local Diseases—The 182 deaths in this class were Local Diseases distributed thus—Diseases of the Nervous System 47, Diseases of the Circulatory System 42, Diseases of the Respiratory System 64, Diseases of the Digestive System 19, Diseases of the Urinary System 7, others 3.

II.—Summary of the action taken during the year for preventing the spread of disease.

Measles appeared in the spring and, as usual, spread Measles. to all parts of the town. Many of the cases were of a severe type, and many adults as well as children were affected. On May 9th I advised the closing of Littleworth School, and on the 11th the closing of St. Paul's Mixed and Infants, St. Mary's Infants, and St. Patrick's Infants Schools—all to remain closed until June 2nd, the date on which the Whitsuntide holidays began. I advised closing, as so many children in these particular schools were ill with the disease, the absentees numbering from 33 to 50 per cent. of those on the register. The remaining elementary schools were not so seriously affected and I advised in their case that all scholars from an infected house should be excluded from school for a period of three weeks from the last outbreak. These precautions proved to be sufficient, and the epidemic gradually subsided.

Notification of Infectious Diseases—There were Notification of Infectious Diseases. 236 cases notified, compared with 113 in the previous year, and they were returned as follows :—

Scarlet Fever	...	86
Diphtheria	...	101
Typhoid Fever	...	25
Erysipelas	...	23
Puerperal Fever	...	1

Scarlet Fever—There were 86 cases notified, compared with 80 in the previous year and 33 two years ago. Scarlet Fever. Of this number 80 were isolated in hospital, 5 were treated at home, and 1 was in the Prison. There were no deaths from Scarlet Fever,

Diphtheria

Diphtheria.—Up to September, isolated cases of Diphtheria to the number of 10 had appeared. In October 29 cases were reported, in November 34, and December 28, making a total of 101 for the year. The weekly notifications from the beginning of October until the end of the year were 2, 14, 8, 5, 4, 16, 4, 8, 2, 7, 6, 7, 8. This is the severest epidemic that has been recorded. During the previous ten years, from 1890 to 1899 the annual notifications of diphtheria have been 2, 1, 0, 1, 0, 4, 19, 13, 0, 2. As is usual in nearly all outbreaks of infectious disease, the North End of the town was affected first, Brook Street heading the list with 9 cases. The month following the North End was practically free from the disease. The South End was now the district supplying the cases, the streets affected being Pilgrim Street, Friars Road and Terrace, Telegraph Street, Shrewsbury Road, Ingestre Road, with a few cases also in North Back Walls. In December it appeared in North Castle Street (1 case) South Street (1 case), Station Road, Cramer Street and Lichfield Road. At the time of writing this report (February 1901), the disease is practically confined to Littleworth, the rest of the town being free. In the early cases free use was made of the County Council's arrangements with Mason University College for bacteriological examination. The facilities thus afforded to Medical Officers of Health, and, through them, to the local medical practitioners has been of great value. Accommodation is not provided in the Isolation Hospital for Diphtheria, and the 10 cases up to September were all treated at their homes. In the second week of October, however, things looked so serious, that I considered it of the first importance to isolate the cases, and, with that object, I opened the Wooden Annexe, and extra Nurses were engaged. Ten beds were thus provided, and all the patients fit to be moved were at once transferred there. The accommodation proved to be adequate, and every subsequent case requiring it was isolated. Altogether 50 cases were dealt with in the Isolation Hospital, 5 cases in the Workhouse Hospital, while 56 were treated at their homes.

Where Treated.	No. of Cases	Deaths.	Proportion of Deaths to Cases.
At Home ...	56	12	21·4 per cent.
Isolation Hospital ..	50	6	12 „
Workhouse Hospital	5	0	0 „
Total	101	18	17·8 per cent.

All the Hospital cases were treated with Antitoxin. So far as I know only 18 of the home cases were so treated, although it is supplied free. Many of the cases were far advanced before medical advice was sought, and there can be no doubt that a fatal issue might have been avoided in many cases if treatment had been begun earlier. I wish I could speak with some degree of certainty of the cause of this epidemic. All the houses affected have been visited by me, some of them several times, and the chief sanitary defects I noted were that in a large proportion of instances the houses were damp. This dampness came not so much from defective spouting as from the ground. Houses with unpaved yards and fronts were certainly more affected than others. And often these unpaved yards were fouled by decaying vegetable matter, and by animals and fowls kept on the premises. In many cases the slop-closets had been repeatedly blocked, and in these and other instances the drains were found to be defective. Some of the houses were found to be filthy, others were just as clean. The weather during this period was persistently mild and damp, with little or no wind—just the conditions favourable to the development of germ life. Whatever other causes may have been at work, I cannot but think that the conditions of the air, both in the ground and above it, have been potent factors in generating the diphtheria bacillus. The milk supply might, of course, very readily and very quickly cause an epidemic. I enquired carefully into this matter, and was struck with the variety of the supply. Rarely did two houses even in the same street have the same milk. So this had evidently nothing to do with it. Nor can the Schools be said to have started it. The first cases were not attending school, and several original cases were in children under school age. Besides, no school was particularly affected until towards the end of the year. The schools, however, must have helped to spread the disease once it had started. An analysis of the ages of those affected goes

to support this, for of the 101 cases notified 24 were under five years of age, 70 were over five and under fifteen, and 7 over fifteen. Therefore of children under fifteen, those of school age were affected in the proportion of 3 to 1 of those under school age. Contrary to what one would expect, the mortality rate was higher among the older children. One-fifth of these died compared with a sixth of the younger group.

Typhoid Fever

Typhoid Fever—There were 25 cases notified compared with 11 in the preceding year. 5 of the cases did not belong to the district. Other 6 were traced directly to one person, the nature of whose illness had not been detected in the earlier part of the disease. Two cases arose among the employes at the Station Post Office, and they arose, I think, from insanitary conditions existing there, one of which was impure water. I reported fully on this matter in October. In another case there was a serious leak into the house from the drain. One case was contracted away from home. Of the remaining cases, in two instances the drain had been blocked more than once, in the others no special sanitary defect could be pointed to as having probably set up the disease.

Isolation Hospital

Isolation Hospital—There were 132 cases treated in the Borough Isolation Hospital during the year. Of these, 82 were Scarlet Fever (of which 2 were admitted from Eccleshall district), and 50 were Diphtheria. There were no deaths from Scarlet Fever and 6 from Diphtheria. I was not able to isolate a single case of Typhoid Fever, as there is no separate accommodation provided for that fever. Several of the cases wished for treatment in hospital, and they had to be refused admission. Typhoid Fever requires both isolation and skilled nursing, and how are these to be obtained in a house with only two bedrooms, and where there is a small family? It is very necessary that steps be taken without delay to provide the accommodation that is required.

Unhealthy Dwellings

Unhealthy Dwellings—During the year I certified 9 houses as unfit for human habitation, under Sec. 30, Part II, of the Housing of the Working Classes Act, 1890. They were situated in Mill Street, Eastgate Street, Tenter Banks, Duke Street, New Street, North Street, and Elley's Square. Eight have been repaired, and one has been

permanently closed. Many defects have been dealt with through the Inspector's department in the ordinary course. There are many houses remaining yet to be dealt with during the ensuing year. Some, no doubt, can be repaired and put into a habitable condition. Others will have to be closed as nothing short of re-construction can make them healthy.

Housing of the Working Classes—This subject has been before the Town Council for three years. It was dealt with fully in my report for 1898, and, I am glad to say, substantial progress has now been made in the matter. The Special Committee, appointed in May, 1899, to get out plans and estimates for Artisans' Dwellings, recommended the erection of thirty-one cottages on land in Crooked Bridge Road belonging to the Corporation, and that they should be let at a rental not exceeding 4/- per week, to include all Rates and Water Rent, and that any sum required in excess of such rental for interest on loan and the provision of a Sinking Fund, be provided out of the Rates. The Committee's recommendation has been adopted by the Council, and it is hoped the sanction of the Local Government Board will soon be obtained to raise the necessary loan. The dilapidated property in Broad Eye, belonging to the Corporation, has been replaced by nine new cottages, and they are now ready for occupation. Six of these cottages are to be let at a weekly rental of 4/3, and three at a rental of 4/6, including Rates and Water Rent.

Disinfection of houses has been carried out in every instance of Scarlet Fever infection, also in the majority of Diphtheria cases. Bedding, clothing, and all unwashable articles are regularly removed and disinfected in the Washington Lyon's Steam Apparatus.

Sanitary Inspection—A Table, giving the Summary of the work done during the year in the Sanitary Inspector's Department is appended. The places over which the Sanitary Authority has control, that is, the Slaughter-houses and Bake-houses, Cowsheds, Dairies and Milkshops, and Common Lodging Houses have been regularly visited. They have been, for the most part, reported as in good condition. The Lodging Houses have been entirely free from infectious disease during the year,

Vaccination
Statistics

Vaccination Statistics—The subjoined figures for year 1899 apply to the whole of the Stafford Union; but they serve as an index of how the provisions of the Vaccination Act are being carried out:—

Vaccinated	..	..	..	..	676
Insusceptible	..	..	..	..	4
Objections	..	..	..	..	36
Dead, unvaccinated	..	..	..	..	68
Postponed	..	..	..	..	13
Removed, address unknown	..	..	..	..	33
Summoned	..	..	..	..	1
TOTAL NUMBER OF BIRTHS					831

Tables of Statistics, drawn up in accordance with the requirements of the Local Government Board, are appended.

F. MILNES BLUMER.

Stafford,

26th February, 1901



TABLE III.

**Cases of Infectious Disease notified during the
Year 1900.**

NOTIFIABLE DISEASE.	CASES NOTIFIED.				Cases Removed to Hospital.
	At all ages.	At Ages—Years.			
		under 5.	5 to 15	15 and over.	
Small pox ...	...	...	...	...	...
Cholera ...	...	...	...	...	...
Diphtheria...	101	24	70	7	50
Membranous Croup	...	}			...
Erysipelas ...	23				...
Scarlet Fever	86				80
Typhus Fever	...				...
Enteric Fever	25				...
Relapsing Fever	...				...
Continued Fever	...				...
Puerperal Fever	1				...
Plague ...	...	...	...	...	...
Totals ...	236				130

TABLE IV.

Causes of, and Ages at, Death during Year 1900.

CAUSES OF DEATH.	DEATHS AT SUBJOINED AGES.							Deaths in Public Institutions.
	All Ages	under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	
Smallpox ... ..	...	...	...	...	...	...	...	...
Measles	19	5	14	...	...	...	...	1
Scarlet Fever ... ..	...	...	...	...	...	...	...	...
Whooping Cough	10	5	5	...	...	...	...	...
Diphtheria & Membranous Croup	18	...	4	14	...	...	...	7
Croup	1	...	...	1	...	...	...	...
Fever { Typhus ... ..	...	...	...	...	...	...	...	...
{ Enteric ... ..	...	...	...	...	...	...	...	...
{ Other Continued ... ..	...	...	...	...	...	...	...	...
Epidemic Influenza	1	...	...	...	1	...	...	...
Cholera ... ..	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...
Diarrhoea	4	2	1	...	...	...	1	...
Enteritis	2	2	...	...	...	...	...	...
Puerperal Fever	1	...	...	...	...	1	...	...
Erysipelas	1	...	...	...	...	...	1	...
Other Septic Diseases ... ..	...	...	...	...	...	...	...	...
Phthisis	28	...	3	1	4	20	...	6
Other Tubercular Diseases	3	...	3	...	...	...	...	1
Cancer, Malignant Disease	13	...	...	...	1	7	5	3
Bronchitis	45	6	10	1	...	9	19	3
Pneumonia	18	6	5	1	...	6	...	6
Pleurisy ... ..	...	...	...	...	...	...	...	...
Other Diseases of Respiratory } Organs	1	...	...	...	...	1	...	1
Alcoholism ... ..	...	...	...	...	...	...	...	...
Cirrhosis of Liver	5	...	...	...	...	4	1	2
Venereal Diseases	1	1	...	...	...	...	...	...
Premature Birth	15	15	...	...	...	...	...	...
Diseases & Accidents of Parturition	2	...	...	...	...	2	...	...
Heart Diseases	39	1	...	...	1	19	18	13
Accidents	4	...	2	...	1	...	1	2
Suicides	1	...	...	...	...	1	...	...
Diseases of Nervous System	47	17	3	2	1	14	10	10
" Digestive System	19	3	1	1	1	10	3	5
" Urinary System	7	...	...	...	...	6	1	3
All other Causes	61	17	1	1	2	9	31	12
All Causes	366	80	52	22	12	109	91	75

TABLE V.

SUMMARY OF SANITARY WORK DONE IN THE INSPECTOR OF
NUISANCES' DEPARTMENT DURING THE YEAR 1900 IN THE
URBAN SANITARY DISTRICT OF STAFFORD.

	Inspections and Observa- tions	Formal Notices by Authority.	Nuisances Abated after Notice.
Dwelling- houses			
and Schools			
{ Foul Conditions .....	.....	.....	.....
{ Structural Defects ..	.....	.....	.....
{ Overcrowding	2	2	2
{ Unfit for Habitation .....	.....	9	8
Lodging-houses	60	.....	.....
Dairies and Milkshops.....	56	.....	.....
Cowsheds	56	.....	.....
Bakehouses	70	.....	.....
Slaughter-houses	325	.....	.....
Ashpits and Privies	4	4	4
Deposits of Refuse and Manure .....	.....	.....	.....
Water Closets ..	61	61	61
House- Drainage. { Defective Traps & Bad Spouting	67	67	65
{ No Disconnection.....	.....	.....	.....
{ Other Faults .....	.....	.....	.....
Water Supply .....	.....	.....	.....
Pigsties	6	6	6
Animals improperly kept.....	16	16	16
Inspections and Observations made	1900	.....	.....
Smoke Nuisances.....	3	3	3
Other Nuisances
Totals	2626	168	165

Seizures of Unwholesome Food	Nos. 1
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Precautions against Infectious Diseases.

Lots of Infected Bedding Disinfected...	154
" " Clothing " ...	.....	.....	194
Houses Disinfected after Infectious Disease .....	.....	.....	88
Schools ditto ditto .....	.....	.....	1